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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/649,092	08/28/2000	Masato Karaiwa	HIR-115	7797

7590 08/28/2003
Sherman & Shalloway
413 North Washington Street
Alexandria, VA 22314

EXAMINER

JACKSON, MONIQUE R

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 08/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/649,092

Applicant(s)

KARAIWA, MASATO

Examiner

Monique R Jackson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. The amendment filed 6/2/03 has been entered. Claims 1-6 are pending in the application.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Hamada et al (USPN 5,362,572.) Hamada et al teach a two-layer thermoplastic elastomer sheet useful in producing molded products for automobiles comprising a skin layer and a reverse surface layer wherein a first laminate embodiment comprises [I] a skin layer composed of a thermoplastic elastomer containing 1-85 parts by weight of a polyolefin resin (A) such as homopolymers and copolymers of ethylene or propylene or a mixture of polyethylene and polypropylene having a mixing ratio of 10/90 to 70/30 (polyethylene/polypropylene), and 15-99 parts by weight of an alpha-olefin copolymer rubber (B) such as an ethylene-propylene-non-conjugated rubber; and [II] a reverse surface layer composed of a thermoplastic elastomer containing 6 to 90 parts by weight of polyolefin resin (A), and 10 to 94 parts by weight of alpha-olefin copolymer rubber (B); wherein the skin and surface layers may further contain 5 to 100 part by weight, more preferably 20 to 70 parts by weight, per 100 parts by weight of the sum of polyolefin resin (A) and olefin rubber (B), of a mineral oil softening agent (D); and wherein the thermoplastic

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elastomers of both layers may be partially crosslinked by dynamically heat treating the blends in the presence of a crosslinking agent (Abstract; Col. 1, line 64-Col. 2, line 17; Col. 2, line 56-Col. 6, line 21.) In a second preferred embodiment, Hamada et al teach a second two-layer thermoplastic elastomer sheet including a skin layer (I) which includes a mixture of 100 parts by weight of the partially crosslinked elastomer and 5 to 100 parts by weight of a polyolefin resin (E) such as polyethylene, wherein the mixture is dynamically heat treated in the presence of a crosslinking agent (Col. 3, lines 6-11; Col. 5, lines 16-28.) Hamada et al further teach examples that read upon the instantly claimed weight parts and oily softening agent ratios, specifically with regards to instant Claim 1, Examples 1 and 2 read upon the invention wherein Example 1 teaches a laminate comprising a skin layer of 37 weight parts polyolefin, 63 weight parts ethylene-alpha-olefin non-conjugated polyene rubber, 30 parts oily softening agent dynamically heat treated with a crosslinking agent; and a surface layer comprising 50 weight parts polyolefin, 50 weight parts ethylene-alpha-olefin non-conjugated polyene rubber, 30 parts oily softening agent dynamically heat treated with a crosslinking agent; hence when calculated according to the instantly claimed basis, the weight parts of each of the components fall within the instantly claimed ranges and the oily ratio (a) is greater than the oily ratio (b) (Example 1.) With regards to instant Claim 2, Example 3 which incorporates polyethylene into the skin layer reads upon the weight part ranges instantly claimed wherein the oily ratio (a') is greater than 0.8 of the oily ratio (b') as instantly claimed. With regards to Claims 3-6, the Examiner takes the position that the terms "glass-run channel" and "roof molding, side molding or window molding for automobiles" recited in the preamble do not add any additional structure to the instantly claimed laminate and hence the laminate taught by Hamada et al anticipates these claims.

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Response to Arguments

5. Applicant's arguments with respect to claims 1-6 have been considered but are moot in view of the new ground(s) of rejection. However, the Examiner would like to acknowledge the Applicant's detailed explanation and background information provided in their reply. Though the Examiner is very familiar with polymer chemistry, the Examiner appreciates the Applicant's clarification given that it appeared as if the specification contained inconsistencies with regards to accepted meanings in the art. The Examiner would further like to note that several of the Applicant's statements are not completely correct, please refer to *Fundamental Principles of Polymeric Materials*, Pages 2 and 389-390. The Applicant states that by definition, a thermoplastic elastomer is the product of copolymerizing TPO and EPDM however it is noted that thermoplastic elastomers are not limited to just the product of copolymerizing TPO and EPDM and hence are not defined as such, i.e. styrene-*b*-butadiene-*b*-styrene is a common thermoplastic elastomer. It is also noted that thermoplastic elastomers may be crosslinked to form a vulcanized product, hence thermosettable or thermosetting, however crosslinking is not required to provide elastomeric properties and is therefore a benefit of the thermoplastic elastomers which exhibit elastomeric or rubbery properties at use temperature but upon heating behave as a true thermoplastic. Further Applicant's contrast of a thermoplastic elastomer with a thermoplastic polymer is improper given that an elastomer is in fact a polymer, though a polymer may not be an elastomer.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Itoh et al (USPN 5,702,827) teach olefin thermoplastic elastomers and laminates made thereof.

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7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monique R Jackson whose telephone number is 703-308-0428. The examiner can normally be reached on Mondays-Thursdays, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul J Thibodeau can be reached on 703-308-2367. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Monique R. Jackson
Patent Examiner
Technology Center 1700
August 20, 2003